To: Christina Rinderle[christina@durango.net]; Marcie Demmy

Bidwell[marcie@mountainstudies.org]

Cc: Peter Butler[ Personal Email/Ex. 6 ; Horn - DNR, Barb[barb.horn@state.co.us]; Wall, Dan[wall.dan@epa.gov]; tojohns@southernute-nsn.gov[tojohns@southernute-nsn.gov]; Drake,

Phil[pdrake@southernute-nsn.gov]

From: Hartenstine, Curtis

**Sent:** Wed 8/12/2015 3:02:20 PM

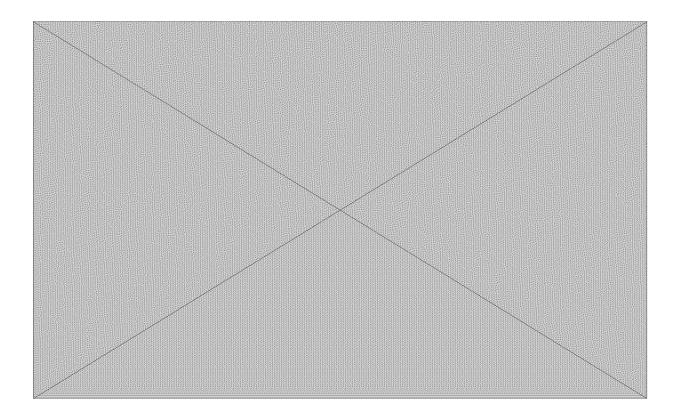
Subject: RE: Initial continuous pH data, northern reservation boundary

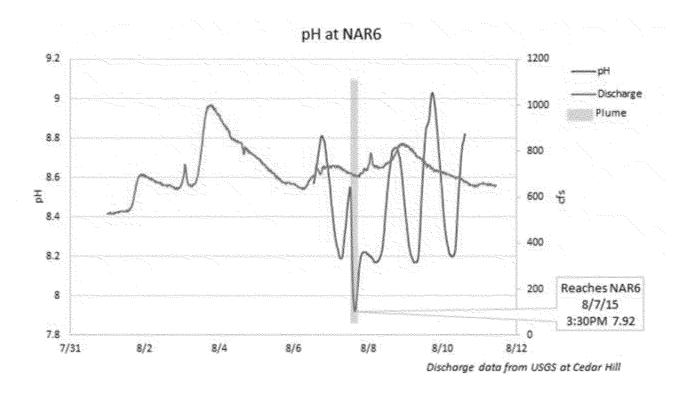
removed.txt

Animas Spill Map.jpg

## HI Christina,

We are happy to share our information. Here are two other graphs that show the plume moving downstream. I received some analytical data today from a an 8/8 sampling event (Saturday) and I will share that once I have QC'd the data and done some comparisons to historical and State Water Quality Standards. AR 16 is 16 miles north of the NM Border and AR 6 is about 4 miles north of the border-location map attached.





Best, Curtis

Curtis Hartenstine

Southern Ute Indian Tribe

Water Quality Progam Manager

970-563-4705

From: crinderle@gmail.com [ Personal Email/Ex. 6 ] On Behalf Of Christina Rinderle

Sent: Wednesday, August 12, 2015 5:31 AM

To: Marcie Demmy Bidwell <marcie@mountainstudies.org>

Cc: Hartenstine, Curtis <charten@southernute-nsn.gov>; Peter Butler

Personal Email/Ex. 6 ; Horn - DNR, Barb <br/>
<wall.dan@epa.gov>; Johnson, Tom <tojohns@southernute-nsn.gov>; Drake, Phil <pdrake@southernute-nsn.gov>

Subject: Re: Initial continuous pH data, northern reservation boundary

## Curtis,

Thank you so much for sharing your data, and Marcie, it has been great to get to know you a bit over the last week and I appreciate all of your hard work and efforts through Mountain Studies Institute. The City Manager and I discussed expanding our relationship with your organization and he'll be in touch with you soon if he hasn't already. I see Barb copied in on this email and hope all is well! I'm reminded of past projects we worked on and sending you my thoughts! I appreciate all the information! Now onto the cleanup efforts for all these mines! Warm regards,

Christina

On Tue, Aug 11, 2015 at 3:21 PM, Marcie Demmy Bidwell < <u>marcie@mountainstudies.org</u>> wrote:

Curtis,

Thank you- we would like to compare our ph data with yours on a space and time format some how- it would be a neat picture.

M

## **Mountain Studies Institute**

**Executive Director** 

1309 E. 3<sup>rd</sup> Avenue #106, Durango CO 81301

P.O. Box 426, Silverton CO 81433

Office- 970-387-5161 | Cell- 970-426-8863

## www.mountainstudies.org

MSI moved to the Smiley Building- Stop by and visit us at our new address!

From: Hartenstine, Curtis [mailto:charten@southernute-nsn.gov]

Sent: Tuesday, August 11, 2015 2:30 PM

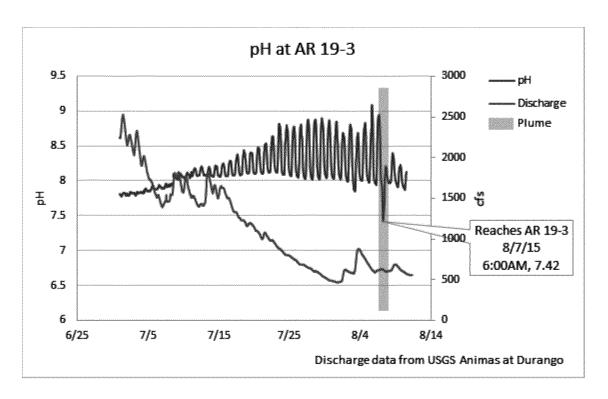
**To:** Peter Butler < Personal Email/Ex. 6 >; Horn - DNR, Barb < barb.horn@state.co.us >; Wall, Dan < wall.dan@epa.gov >; Marcie Demmy Bidwell < marcie@mountainstudies.org >; christina@durango.net; Johnson, Tom < tojohns@southernute-nsn.gov >; Drake, Phil < pdrake@southernute-nsn.gov >

Subject: Initial continuous pH data, northern reservation boundary

Hello All,

Please see the attached graph of continuous reading sonde data (30 min increment) at the northern border of the Reservation Dallabetta (19.3 miles upstream of the state line with NM). As you can see from the graph, pH levels dropped to about 7.4 for a short period of time during the initial plume. I included flow data from the gauge at Durango and this has been corrected to match our location downstream. More graphs and data to come as they are available.

Additionally, white sucker young of the year in large numbers throughout the reservation (attached photo is from some south of the Weasleskin Bridge on the Reservation) - good news. We captured some of them on Friday, in the most intense part of the plume and have kept them alive in that water in our offices. Our wildlife program has round tail chub in the river since before the plume and they have also survived.



Best, Curtis

Curtis Hartenstine

Southern Ute Indian Tribe

Water Quality Progam Manager

970-563-4705